

**IN THE CLAIMS:**

The text of all pending claims (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claims 14-15 without prejudice or disclaimer, AMEND claim 1, and ADD new claims 16-17 in accordance with the following:

1. (CURRENTLY AMENDED) A blade-type optical transmission apparatus, comprising:
  - a plurality of main-signal blades, each of which is provided with an external optical signal interface unit, a cross-connect unit, and an internal optical signal interface unit;
  - a blade enclosure in which said plurality of main-signal blades are enclosed; and
  - a back plane which is situated inside said blade enclosure and provides a two-fiber ring connection for the internal optical signal interface unit between the main-signal blades, wherein the two-fiber ring connection has two fibers connecting between each two adjacent ones of the main-signal blades.
2. (ORIGINAL) The blade-type optical transmission apparatus as claimed in claim 1, further comprising a bypass blade, which is attached to a portion of said blade enclosure that is configured to receive one of the main-signal blades, and partitions the ring connection provided by said back plane.
3. (ORIGINAL) The blade-type optical transmission apparatus as claimed in claim 1, further comprising a through blade, which is attached to a portion of said blade enclosure that is configured to receive one of the main-signal blades, and allows a through passage of a main signal inside said through blade as the main signal is exchanged with said back plane.
4. (ORIGINAL) The blade-type optical transmission apparatus as claimed in claim 1, further comprising a power blade, which is attached to a portion of said blade enclosure that is configured to receive one of the main-signal blades, and amplifies a main signal exchanged with

said back plane.

5. (ORIGINAL) The blade-type optical transmission apparatus as claimed in claim 1, further comprising a joint blade, which is attached to a portion of said blade enclosure that is configured to receive one of the main-signal blades, and exchanges a main signal, exchanged with said back plane, with a back plane of another blade-type optical transmission apparatus.

6. (ORIGINAL) The blade-type optical transmission apparatus as claimed in claim 1, wherein the ring connection has two points between which a coupling is provided by one of the main-signal blades, said back plane including a mechanism which provides a coupling between the two points of the ring connection when said one of the main-signal blades is not inserted.

7. (CANCELLED)

8. (PREVIOUSLY PRESENTED) The blade-type optical transmission apparatus as claimed in claim 1, wherein said back plane includes a two-fiber Bidirectional Line Switch Ring (BLSR) for providing the ring connection.

9. (PREVIOUSLY PRESENTED) The blade-type optical transmission apparatus as claimed in claim 1, wherein said back plane includes a plurality of two-fiber Bidirectional Line Switch Rings (BLSRs) for providing the ring connection.

10. (PREVIOUSLY PRESENTED) The blade-type optical transmission apparatus as claimed in claim 1, wherein the signal transmitted through the ring connection is a wavelength multiplexed optical signal.

11. (CANCELLED)

12. (PREVIOUSLY PRESENTED) The blade-type optical transmission apparatus as claimed in claim 1, wherein one of the main-signal blades provides at least one of a function to partition the two-fiber ring connection inside said one of the main-signal blades, a function to allow a through passage of a main signal inside said one of the main-signal blades as the main signal is exchanged with said back plane, and a function to amplify a main signal exchanged

with said back plane.

13. (ORIGINAL) The blade-type optical transmission apparatus as claimed in claim 1, wherein one of the main-signal blades provides a function to exchange a main signal, exchanged with said back plane, with a back plane of another blade-type optical transmission apparatus.

14-15. (CANCELLED)

16. (NEW) A blade-type optical transmission apparatus, comprising:  
a plurality of main-signal blades, each of which is provided with an external optical signal interface unit, a cross-connect unit, and an internal optical signal interface unit;  
a blade enclosure in which said plurality of main-signal blades are enclosed;  
a back plane which is situated inside said blade enclosure and provides a two-fiber ring connection for the internal optical signal interface unit between the main-signal blades, wherein the two-fiber ring connection has two fibers connecting between two adjacent main-signal blades; and  
a bypass blade, which is attached to a portion of said blade enclosure that is configured to receive one of the main-signal blades, and partitions the ring connection provided by said back plane.

17. (NEW) A blade-type optical transmission apparatus, comprising:  
a plurality of main-signal blades, each of which is provided with an external optical signal interface unit, a cross-connect unit, and an internal optical signal interface unit;  
a blade enclosure in which said plurality of main-signal blades are enclosed;  
a back plane which is situated inside said blade enclosure and provides a two-fiber ring connection for the internal optical signal interface unit between the main-signal blades, wherein the two-fiber ring connection has two fibers connecting between two adjacent main-signal blades; and  
a through blade, which is attached to a portion of said blade enclosure that is configured to receive one of the main-signal blades, and allows a through passage of a main signal inside said through blade as the main signal is exchanged with said back plane.